

CITY OF MANCHESTER
NEW HAMPSHIRE 03101

March 8, 2004

SEALED PROPOSAL INVITATION

IS-0404

NOTICE is hereby given that the City of Manchester will receive sealed proposals in the Office of the Information Systems Department, City of Manchester, State of New Hampshire until three o'clock p.m. (3:00 PM) on March 29, 2004 for the furnishing of the supplies, materials, equipment, or services, as indicated by the items hereunder listed in accordance with the applicable specifications:

Auto Vehicle Location System

The right is reserved to accept any proposal or any part or parts thereof, or to reject any or all proposals.

Any name appearing on the Comptroller General's list of ineligible contractors for Federally-financed and assisted work is not an eligible Bidder. In addition thereto, a proposal based upon the furnishing of equipment or components thereof, manufactured by such an ineligible contractor, will be ineligible for consideration.

The Contractor will be required to comply with all applicable Equal Employment Opportunity Laws and Regulations.

All proposals are subject to the terms and conditions and specifications set forth in this Sealed Proposal Invitation.

BY: Diane S. Prew
Director, Information Services

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I. TERMS AND CONDITIONS

A. Proposals - Where Received

Proposals will be received by the Information Systems Department of the City of Manchester, State of New Hampshire, at the place and until the time specified in the Notice to Bidders and then publicly read aloud for the information of Bidders and other properly interested who may be present either in person or by representative. NO PROPOSAL WILL BE ACCEPTED AFTER TIME AND DATE SPECIFIED.

B. Definitions

The following meanings are attached to the defined words when used in this proposal form:

1. The word "City" means the City of Manchester, New Hampshire.
2. The word "Bidder" means the person, firm, or corporation submitting a proposal on these specifications or any part thereof.
3. The word "Contractor" means the person, firm, or corporation with whom the Contract is made by carrying out the provisions of this Sealed Proposal Invitation and the Contract.
4. The words "firm price" shall mean a guarantee against price increase during the life of the Contract.

C. Submission of Proposal

This Sealed Proposal Invitation is sent to you in duplicate. Ten (10) complete copies must be returned when bidding. Strict compliance with the requirements of the Notice to Bidders, Terms and Conditions, and the instructions printed on the forms is necessary. All designations and prices shall be fully and clearly set forth. All blank spaces in the proposal forms shall be suitably filled in. For the convenience of Bidders, extra sets of proposal forms are available at no cost and on demand, at the Office of the Information Systems Department, City of Manchester, State of New Hampshire.

D. Signatures on Proposal Forms

Each proposal must give the full business address of the Bidder and be signed by him with his usual signature. Proposals by partnerships must furnish the full names of all partners and must be signed with the partnership name by one of the members of the partnership or by an authorized representative, followed by the signature and title of the person signing. Proposals by corporations must be signed with the legal name of the corporation, followed by the state of incorporation and by the signature and title of the president, secretary, or other person authorized to bind it in the matter. The name of each person signing shall also be typed or printed below the signature. A proposal by a person who affixes to his signature the word "president", "secretary", "agent", or other title without disclosing his principal may be held to be the proposal of the individual signing.

When requested by the Director, Information Services, satisfactory evidence of the authority of the officer signing on behalf of the corporation shall be furnished.

E. Sealed and Marked

Proposals, with the required bid security, must be securely sealed in a suitable envelope, addressed and marked on the outside as follows:

Sealed Proposal Invitation
IS-0404
Information Systems Department
100 Merrimack St
Manchester, NH 03101-2210

The City of Manchester is not responsible for proposals not properly marked.

F. Bid Security

Bid security, in the form of a bid bond, deposit of cash, or certified check, bank cashier's or bank official's check drawn on a solvent bank, payable to the "City Finance Officer, City of Manchester" in the amount of NOT LESS THAN TEN PERCENT (10%) of the total amount of the bid (before cash discount and/or trade-in) **must** accompany each proposal as a guarantee that if the proposal is accepted a Contract will be entered into. Such bid deposits of all Bidders will be held by the City of Manchester until all proposals submitted shall have been canvassed and the proposals have either been rejected in whole or in part or the award of the Contract or Contracts has been made. The bid deposit of the successful Bidder will be held until a Contract is duly executed. Bid deposits will be returned to unsuccessful Bidders within one (1) week after award of the Contract. If the successful Bidder to whom a Contract shall have been awarded refuses to execute the contract and to furnish the performance and payment bonds herein described, within ten (10) working days after award of the Contract, the amount of the bid deposit shall be forfeited to and retained by the City of Manchester as liquidated damages for such neglect or refusal.

G. Interpretations

No oral interpretations will be made to any Bidder as to the meaning of the specifications or terms and conditions of this Sealed Proposal Invitation. Every request for such interpretation or requests for a change in the specifications or terms and conditions shall be made in writing and addressed and forwarded to Diane S. Prew, Director, Information Services, 100 Merrimack Street, City of Manchester, State of New Hampshire, five (5) or more working days before the date fixed for the opening of proposals. Every interpretation made to a Bidder will be in the form of an addendum to the Sealed Proposal Invitation which, if issued, will be sent as promptly as practicable to all persons to whom the Sealed Proposal Invitations have been issued. All such addenda shall become a part of the Sealed Proposal Invitation.

H. Incomplete Proposals

Proposals which are incomplete, not properly endorsed, or signed, or otherwise contrary to these instructions may be rejected as informal by the Director, Information Services, City of Manchester, State of New Hampshire.

I. Conditional Proposals

Conditional proposals will not be accepted.

J. Alternative Proposals

Alternative proposals which do not minimally conform to the specifications will not be accepted.

K. Taxes

As the City of Manchester is exempt from the payment of Federal Excise Taxes, all prices quoted herein are not to include these taxes.

L. Prices

All prices and delivery times quoted must be firm FOB destination, City of Manchester, State of New Hampshire, unless otherwise indicated by the City. TIME IS OF THE ESSENCE.

M. Inside Delivery

Quotations should include all charges for inside delivery, packing, crating, containers, etc. Unless otherwise stated by the Bidder, prices quoted will be considered as being based on inside delivery to the destination designated in this Sealed Proposal Invitation and to include all inside delivery and packing charges.

N. Unit Pricing

Prices shall be stated in units of quantities specified. In case of discrepancy in computing the amount of the proposal, the unit prices quoted will govern.

O. Price Reductions

It is understood and agreed that should any price reductions occur between the opening of this proposal and the delivery of any order, the benefit of any such reductions will be extended to the City.

P. Compliance with Specifications

Unless otherwise stated by the Bidder, the proposal will be considered as being in strict accordance with the specifications outlined in this Sealed Proposal Invitation. References to a particular trade name, manufacturers' catalogue, or model number, are made for descriptive purposes to guide the Bidder in interpreting the requirements of the City. They should not be construed as excluding proposals on other types of materials, equipment, and supplies. However, the Bidder, if awarded a Contract, will be required to

furnish the particular item referred to in the specifications or descriptions unless a departure or substitution is clearly noted and described in the proposal.

Q. Discounts

1. Cash discounts will be considered when determining the low proposal except when cash discounts hold for a period of less than fifteen (15) days. Cash discounts for payment within a period of less than the above number of days will not be taken into consideration when determining the low bid.
2. Time, in connection with discount offered, will be computed from date of completion and/or delivery and acceptance at destination, or from date correct bill or voucher properly certified by the Contractor is received if the latter date is later than the date of completion and acceptance and/or delivery and acceptance.

R. Penalties

It is understood and agreed that in the event of failure on the part of the Bidder to indicate date of delivery and/or completion, delivery and/or completion will be made within thirty (30) days from date of notification. Should the successful Bidder fail to make delivery or complete Contract within time specified, the City reserves the right to make the purchase at the open market and charge any excess over Contract price to the account of the successful Bidder, who shall pay the same.

S. Delivery

1. The City, through the Director, Information Services, reserves the right to postpone the delivery date to allow for any change in operating conditions or for any other cause not now foreseen. In the event the City elects to exercise this right, all prices quoted pursuant to this Sealed Proposal Invitation will remain firm, and the City shall incur no additional obligation to the Contractor on account of any delay of delivery date ordered by the Director, Information Services.
2. The City, through the Director, Information Services, reserves the right to divert delivery from one location to another, and to allow for any change in operating conditions or for any other cause not now foreseen and to proportion deliveries according to available storage facilities.
3. It is agreed that deliveries and/or completion are subject to strikes, lockouts, accidents, and acts of God.

T. Non-Collusion

The Bidder must certify that no official or employee of the City of Manchester, State of New Hampshire, is pecuniarily interested in the proposal or in the Contract which the Bidder offers to execute or in the expected profits to arise therefrom, and that this proposal is made in good faith without fraud or collusion or connection with any other person submitting a proposal.

U. Withdrawal of Proposal

Proposals may be withdrawn upon written or telegraphic request received from Bidders prior to the time affixed for opening. Negligence on the part of the Bidder in preparing the proposal confers no right for the withdrawal of the proposal after it has been opened. If any proposal is withdrawn after time and date specified, the Bidder shall forfeit his bid security as liquidated damages.

V. Default

In case of default by the Bidder or Contractor, the City of Manchester may procure the articles or services from other sources and hold the Bidder or Contractor responsible for any excess costs occasioned thereby.

W. Basis of Award of Contract

1. The City of Manchester reserves the right to waive any informalities in proposals and to reject any and all proposals, wholly or in part, and to make awards in a manner deemed in the best interests of the City.
2. Proposals shall be evaluated and selection made on the basis of demonstrated competence and qualification for the services required at a fair and reasonable price. In addition to price, the following is a partial list of criteria which will be used in the evaluation process:
 - a. The ability, capacity, and skill of the Bidder to perform the Contract or provide the service required;
 - b. Whether the Bidder can perform the Contract or provide the service promptly, or within the time specified, without delay or interference;
 - c. The character, integrity, reputation, judgment, experience, and efficiency of the Bidder;
 - d. The quality of performance of previous contracts or services;
 - e. The previous and existing compliance by the Bidder with laws and ordinances relating to the Contract or service;
 - f. The sufficiency of the financial resources and ability of the Bidder to perform the Contract or provide the service;
 - g. The quality, availability and adaptability of the supplies, or contractual services to the particular use required;
 - h. The ability of the Bidder to provide future maintenance and service for the use of the subject of the Contract;
 - i. The number and scope of conditions attached to the proposal.
3. The City of Manchester reserves the right to make awards on this proposal by item; or to accept all or part of the proposal or prices quoted.

X. Contract Agreement

The Contract Agreement will be in the form customarily employed by the City of Manchester and will incorporate the Notice to Bidders and Terms and Conditions of this Sealed Proposal Invitation. A copy of the Contract Agreement is attached hereto.

Y. Performance Bond

The successful Bidder will be required to furnish a bond or a certified check on a solvent bank, payable to the "City Finance Officer, City of Manchester" in the amount of one hundred percent (100%) of the total amount of the Contract as a guarantee of the faithful performance thereof.

Z. Indemnification and Insurance

1. The Bidder, if awarded an order or contract, agrees to protect, defend, and save the City harmless against any demand for payment for the use of any patented, material, process, article, or device that may enter into the manufacture, construction, or form a part of the work covered by either order or contract.
2. The Bidder, if awarded an order or contract, agrees to defend, indemnify, and save harmless the City of Manchester from all damages to life and property arising out of the performance of this Contract due to the Bidder's negligence, that of his employees, subcontractors, etc., or due to the negligence of the City of Manchester, its employees, representatives, agents, etc.
3. If, in the judgment of the Director, Information Services, any property is needlessly damaged by an act or omission of the Contractor or his employees, servants, or agents, the amount of such damages shall be determined by the Director, Information Services of the City of Manchester and such amount shall be deducted from any money due the Contractor or may be recovered from said Contractor in actions at law.
4. The City is relieved from all risks of physical loss or damages to the equipment including extra expenses resulting therefrom, during periods of transportation and installation.

AA. Assignment of Monies

The Contractor will not be permitted to either assign or underlet the Contract, nor assign either legally or equitably any monies hereunder, or its claim thereto, without the previous written consent of the City Finance Officer.

BB. Statutes and Ordinances

The Revised Statutes Annotated of the State of New Hampshire, the Charter of the City of Manchester, and all City Ordinances insofar as they apply to the laws of competitive bidding, contracts, and purchases, are made a part hereof.

CC. Guarantees

1. The Bidder to whom a Contract is awarded guarantees to the City of Manchester that all warranties of merchantability and fitness for a particular purpose as provided for in New Hampshire 382A-2-314 and 2-315 shall remain in force and will not be disclaimed.
2. The Bidder to whom a Contract is awarded guarantees to the City of Manchester that all items furnished under this Contract shall be free of defects in design, materials, and workmanship and for a period of three (3) years after final inspection and acceptance shall replace promptly any defective equipment, materials, and/or workmanship required without additional cost to the City. During the three (3) year warranty period, the City will not pack, ship or pay for shipping of defective units for warranty replacement. Warranty repairs or replacements must be provided on site by the vendor.

DD. Additional Terms and Conditions for Contracts in which there is Federal Participation

1. Any proposed change in the Contract shall be submitted to the Director, Information Services for prior approval.
2. No member of or delegate to the Congress of the United States shall be admitted to any share or part of the Contract or to any benefit arising therefrom.
3. No member, officer, or employee of the State of New Hampshire or the City of Manchester during his tenure or one (1) year thereafter shall have any interest, direct or indirect, in the Contract or the proceeds thereof.
4. In connection with the execution of the Contract, the Contractor shall not discriminate against employee or applicant for employment because of race, religion, color, sex, or national origin. The Contractor shall take affirmative action to insure that applicants are employed, and that employees are treated during their employment, without regard to their race, religion, color, sex, or national origin. Such actions shall include, but not be limited to, the following: employment, upgrading, demotion, or transfer; recruitment, or recruitment advertising; layoff, or termination; rates of pay, or other forms of compensation; in selections for training, including apprenticeship.
5. In connection with the performance of the Contract, the Contractor will cooperate with the City of Manchester in meeting its commitments and goals with regard to the maximum utilization of minority business enterprises and will use its best efforts to insure that minority business enterprises shall have the maximum practicable opportunity to compete for subcontract work under this contract.

EE. Assignment of Work

Assignment of any portion of the work by subcontract must be approved in advance by the Director, Information Services. Please identify all subcontractors that you intend to use on this project.

FF. Governing Law

This contract shall be construed according to the laws of the State of New Hampshire.

GG. Disputes

Any dispute concerning a question of fact arising under this contract which is not disposed of by agreement shall be decided by the Director, Information Services, who shall cause its discussion to be reduced to writing and shall furnish a copy thereof. The decision of the Director, Information Services shall be final and conclusive unless within ten (10) days from the date of receipt of such copy the Contractor mails or otherwise furnishes to the City a written appeal addressed to the Mayor and Board of Aldermen. The decision of the Mayor and Board of Aldermen or their duly authorized agent or representative for the determination of such appeal shall be final and conclusive unless determined by the Hillsborough County Superior Court or other court of competent jurisdiction to have been unreasonable. Pending final decision or a dispute hereunder, the Contractor shall proceed diligently with the performance of the Contract and in accordance with the Director, Information Services' decision of the dispute.

HH. Severability

1. Compliance: each party agrees that it will perform its obligations hereunder in accordance with all applicable laws, rules and regulations new or hereafter in effect.
2. Partial Invalidity: If any term or provision of this agreement shall be found to be illegal or unenforceable then, notwithstanding this agreement shall remain in full force and effect and such term or provision shall be deemed stricken.

II. Headings not Controlling

Headings used in this contract are for reference purposes only and shall not be deemed a part of this contract.

JJ. Acceptance Criteria

The City of Manchester reserves the right to reject the items delivered under this contract as not conforming to the specifications unless the following performance criteria are met:

1. Hardware and software must be installed and tested to the satisfaction of the Director, Information Services.
2. Physical delivery and installation does not constitute acceptance.

KK. Method of Payments

1. Payment shall be made not earlier than fifteen (15) days nor longer than forty-five (45) days after delivery, installation and acceptance of all contracted items, and upon rendering an original and one (1) copy of an itemized invoice. Invoices will be forwarded to the Information Systems Department; 100 Merrimack Street; Manchester, NH 03101-2210.

2. Software will not be paid for until appropriate licensing documents have been delivered to the City of Manchester.

II. PROJECT REQUIREMENTS

A. Scope of Project – System Wide

The City expects to derive the following benefits from the system:

- Manage the fleets more efficiently in real-time
- Respond more quickly and accurately to media & management requests
- Enhance the safety of its employees
- Respond more efficiently to resident complaints
- Track and manage labor more accurately
- Utilize the City's investment in the existing GIS
- Optionally Integrate AVL with the existing Computer-Aided Dispatch systems
- Provide a platform that will allow for a future migration path to new in-vehicle hardware and communication platforms

The initial operating capability will consist of in-vehicle equipment and the necessary hardware and software to provide City Departments with a system that will allow them to:

- Track vehicles on a digital map of the City
- Optionally display call locations on a digital map
- Distribute data to other users via a local area network or the Internet
- Utilize its current investment in the City's Arc View™-based Geographic Information System (GIS)
- Archive all data to a database

B. Technical Specifications – System Wide

1. Central System

- a. The server will be located in the City's Information Systems Department, located in the basement of the Central Fire Department. The system will be ready for immediate server redundancy along the City's fiber optic network.
- b. The current redundancy plan is as follows:
Fiber optic connects all major City buildings. The ring is anticipated to be finished over the next 24 months. The backup emergency center, where the redundant servers will be located, is already connected. It is anticipated that there will be no operational interruptions should a problem occur with the current system, to include ALL in-house applications as well as mobile applications.
- c. Please provide server specifications along with service software requirements, and redundancy plans and setup.

2. System Administration

While the server will be located at the City's Information Systems Department, the day to day administration, such as adding and modifying vehicles and users, will be handled by the three departments themselves. The system, through security, should allow each department to maintain their own vehicles and users, and allow each department to determine which of their vehicles can be seen by the other departments.

3. Wireless Technology:

- a. We would like the wireless connection to use either, our frame relay circuit or securely, over the Internet, using the City's T1 lines
- b. Desired throughput to be equal to or greater than 80 kbps, CDMA, GPRS etc.
- c. List all wireless providers and wireless technologies compatible with your system.

4. Functional Requirements

- a. The application software must be a Windows 2000 application and must include a simple to use graphical user interface
- b. Functionality should include:
 - 1) Mapping
 - 2) AVL playback/archive (archive settings programmable)
 - 3) Map printing
 - 4) Finding vehicles
 - 5) Users need the ability to track all vehicles equipped with GPS receivers
 - 6) Display and track vehicles on a digital map
 - 7) Ability to display incident locations
 - 8) Locate addresses
 - 9) Locate vehicles accuracy to 10 meters
 - 10) View own vehicle's position, speed, heading, status AND the position, speed, heading and status of all other vehicles in the fleet in real-time as an option
 - 11) Zoom in, zoom out, pan
 - 12) Place map pins at user-defined locations (businesses, incidents, job locations, etc.)
 - 13) Change map pin title and symbol
 - 14) Set up vehicle colors based on discrete inputs (lights on/off, siren on/off, etc.)
 - 15) Display base map using ESRI shape files (*.shp)
 - 16) Support satellite and aerial imagery in standard and compressed formats
 - 17) Visible and audible alert message based on discrete inputs
 - 18) Phase II ready

- c. Please explain in detail how these functions are handled:
 - 1) Ability to select a section of the map and pull a history of the vehicle path of travel over a specific period of time, based on archived data
 - 2) What type of plotter is supported with your system, or is it all windows based printing?
 - 3) Please include samples of reports generated from the AVL software.
- d. Non-standard Equipment:
 - 1) Mobile GPS Receivers:

This will allow tracking of a non-city, non-hardwired vehicle. This receiver will not display on the main viewing stations in the communications center. It should be another layer that can be viewed from a different station, restricted for investigation purposes only.
- e. Training:

Please explain your training plan in detail, approximate hours to train administrators, in-vehicle and in-house users, and manuals provided. Will training be provided on site or at your facility?
- f. Warranty:
 - 1) All software purchased will carry a one-year (1) warranty upon final system acceptance test
 - 2) Please provide technical support procedures, hours of coverage and locations of support offices
 - 3) All hardware will carry at least a three-year (3) warranty.
 - 4) Please provide any and all related annual costs associated with all software, hardware and support maintenance.
- g. Project Plan:

Please provide a project plan to include a copy of your standard system acceptance test, projected deliverable dates and milestones.

III. TECHNICAL SPECIFICATIONS – POLICE DEPARTMENT

A. Scope of Project – Police Department

With the changing environment, civilian awareness and technical advances, the Manchester Police Department sees the need to keep their officers safe. An Auto Vehicle Location System will provide one necessary element for this task. Tracking a vehicle's progress toward a call for service can mean the difference between life and death. Adding this technology will greatly enhance officer and civilian safety.

The Manchester Police Department averages 100,000 service calls per year. With the demand on 202 sworn officers, it is critical in some cases that they get to their calls in the shortest distance. Allowing the dispatchers the ability to see a unit's location can dramatically decrease response time for the citizens.

B. Current Environment – Police Department

1. Current Fleet Compliment:

VEHICLE TYPE	QUANTITY
Ford Crown Victoria 1996 – 2004	41
Ford Econoline Vans E350	3
Ford Econoline Van E250	1
Ford Econoline Van E150	1
Chevy Tahoe	1
Dodge Caravan	1
Ford F450 Van	1
Ford F350 Pickup	1
Harley Davidson Motorcycles	3
Chevy Impala	3
Ford Panel/Bread van E39W	1

2. Current Vehicle Compliment With Current Modem Installation:

VEHICLE TYPE	QUANTITY
Ford Crown Victoria 1996 – 2004	38
Ford Econoline Vans E350	1
Chevy Tahoe	1

3. Current In-Vehicle Equipment:

- Novatel Lancer Rugged Modem – Qty 40
- Charge Guard CG12D
- Fuse Box – 10Amps for Computer, 3 Amps for Modem
- 20Amps for Charge Guard
- Explore Tablet Genesis II (for our current mobile application)

Total draw on vehicle is 15Amps.

4. Current Mobile/Wireless Technology:

- Current wireless technology is Verizon Wireless, CDPD
- Verizon connects to the City through a 56K frame relay connection
- We are currently testing Verizon wireless, CDMA with our current mobile applications. We need to be sure any wireless technology will work with our current mobile applications first and foremost then apply our AVL application.

C. Technical Specifications Desired - PoliceDepartment

1. Wireless Technology:

- a. We would like to upgrade our speed using a faster more secure technology
- b. We would like the wireless connection to use either, our frame relay circuit or securely, over the Internet, using the City's T1 lines
- c. A PRIVATE network is desired in which we can have transmission exceeding our current 19.2 specifications of CDPD.
- d. Desired throughput to be equal to or greater than 80 kbps, CDMA, GPRS etc.
- e. Need the ability to use CDPD in addition to the new technology while we are moving our applications and modems over to it. Our main focus on this wireless technology is maintaining our mobile application.
- f. Working with our current mobile application provider and wireless technology provider will be required to succeed with this project

2. In-Vehicle:

- a. Desired In-Vehicle Equipment:
 - 1) Modem w/GPS receiver
 - 2) Need to support 802.11 connection in certain locations for software updates
 - 3) 4 additional vehicle input devices
 - 4) Appropriate antenna (hockey puck style preferred)
 - 5) All appropriate mounting materials, brackets and wires
 - 6) Modem and vehicle input devices cannot draw more than 3Amps when ignition is off

Total draw on vehicle not to exceed 15Amps

- b. Vehicles to be outfitted with new modems:

VEHICLE TYPE	QUANTITY
Ford Crown Victoria 1996 – 2004	38
Ford Econoline Vans E350	1
Chevy Tahoe	1
Harley Davidson Motorcycles	3
***** Optional vehicles to be outfitted *****	
Ford F450 Van	2
Ford F350 Pick up	1

- c. Additional equipment to be used for “hot swap” spares”:

- 1) Modems w/GPS Qty - 6
- 2) Antennas Qty - 6

Manchester Police Department needs to review technical specifications on modems and all equipment to be mounted in the vehicles.

- d. The following hardware is also required for in-vehicle software functionality.

- 1) Panasonic Toughbook CF29 – Qty 4
 - a) 1.2Ghz processor, 512MB ram, 60GB hard drive, 13.3 1024X768 (XGA) transmissive, anti-reflective TFT active matrix color LCD w/touch screen integrated CD-rom, 2 additional USB ports
 - b) Windows 2000 Professional operating system
- 2) Additional battery and hard drive required for immediate repairs
- 3) 3-year warranty on Toughbooks and all parts and accessories purchased
- 4) Required Options: Integrated wireless, CDPD, GPRS or CDMA compatible, vehicle mount port replicator, and stylus pen with tethered hold
- 5) Any vehicle mounting information is requested to assist our staff on the installation of the Panasonic Toughbook vehicle mount port replicator
- 6) Mounts required for 3-Ford Crown Victorias and 1-Chevy Tahoe

- e. In-vehicle software requirements:

- 1) In-vehicle software will be required in 4 vehicles only. Installed and configured on the Toughbook CF29.
- 2) Need the ability to track all vehicles equipped with GPS receivers
- 3) Digital map, display vehicles
- 4) Ability to display incident locations
- 5) Locate addresses
- 6) Locate vehicle’s accuracy to 10 meters
- 7) View own vehicle’s position, speed, heading, status AND the position, speed, heading and status of all other vehicles in the fleet in real-time as an option
- 8) Zoom in, zoom out, pan

- 9) Place map pins at user-defined locations (businesses, incidents, job locations, etc.)
 - 10) Change map pin title and symbol
 - 11) Set up vehicle colors based on discrete inputs (lights on/off, siren on/off, etc.)
 - 12) Display base map using ESRI shape files (*.shp)
 - 13) Support satellite and aerial imagery in standard and compressed formats
 - 14) Visible and audible alert message based on discrete inputs
- f. In-vehicle functions:
- 1) When the vehicle is turned on, the system should automatically log into the system
 - 2) There should be no user involvement for GPS transmissions
 - 3) The unit will have the capability of sending position reports on a fixed interval or of storing a number of position reports and forwarding the information to the control center on a fixed interval
 - 4) The unit will be able to be programmed and re-programmed over the air and will dynamically adjust reporting rates without operator input in crisis or event situations (i.e. lights on, vehicle speed over 70 mph, airbag released, etc.)
3. Departmental Connectivity
- 1) The Manchester Police Department communication center will be the ONLY place to view and manage the Police Department's unit locations, in addition to four Police mobile units.
 - 2) The Police Department will have five seats in their communication center: two dispatchers, two call takers and one dispatch supervisor. The two dispatchers and one supervisor will have the ability to make additions and changes to their local display as well as having the options to change the main display that will be on the wall.
 - 3) We want the option to have three additional viewing stations, one in the Officer In Charge's office and two to be determined.

IV. TECHNICAL SPECIFICATIONS – WATER WORKS

A. Scope of Project – Water Works

The Manchester Water Works is looking for a more limited implementation of AVL than the Manchester Police Department. They require modems w/GPS receiver, but no additional inputs.

B. Technical Specifications Desired – Water Works

1. Wireless Technology:

- a. We would like the wireless connection to use either, our frame relay circuit or securely, over the Internet, using the City's T1 lines
- b. Desired throughput to be equal to or greater than 80 kbps, CDMA, GPRS etc.

2. In-Vehicle:

a. Desired In-Vehicle Equipment:

- 1) Modem w/GPS receiver
- 2) Appropriate antenna (hockey puck style preferred)
- 3) All appropriate mounting materials, brackets and wires
- 4) Modem cannot draw more than 3Amps when ignition is off

Total draw on vehicle not to exceed 15Amps

b. Vehicles to be outfitted with new modems:

VEHICLE TYPE	QUANTITY
Chevrolet 3500 HD	1
Ford E150 Van	2
Chevrolet G10 Express	1
Chevrolet G1500 Van	1
Ford Ranger	1
Chevrolet S10	3
Chevrolet Astro Van	1
Ford F150	1
Chevrolet K1500	1

c. Additional equipment to be used for "hot swap" spares":

- 1) Modems w/GPS Qty - 1
- 2) Antennas Qty - 1

d. In-vehicle software requirements:

- 1) Need the ability to track all vehicles equipped with GPS receivers
- 2) Locate vehicle's accuracy to 10 meters

- e. In-vehicle functions:
 - 1) When the vehicle is turned on, the system should automatically log into the system
 - 2) There should be no user involvement for GPS transmissions
 - 3) The unit will have the capability of sending position reports on a fixed interval or of storing a number of position reports and forwarding the information to the control center on a fixed interval
- 3. Departmental Connectivity
 - 1) The Manchester Water Works will be the only place to view and manage the Water Works' unit locations.
 - 2) The Manchester Water Works will have three stations: two at their main location on Lincoln St and one at their Water Treatment Plant. These three stations will all have the ability to make additions and changes to their local displays.

V. TECHNICAL SPECIFICATIONS – FIRE DEPARTMENT

A. Scope of Project – Fire Department

The Manchester Fire Department is currently seeking funding for this project. The functionality they are seeking is very similar to that of the Manchester Police Department.

B. Technical Specifications Desired – Fire Department

1. Wireless Technology:

- a. We would like the wireless connection to use either, our frame relay circuit or securely, over the Internet, using the City's T1 lines
- b. Desired throughput to be equal to or greater than 80 kbps, CDMA, GPRS etc.

2. In-Vehicle:

a. Desired In-Vehicle Equipment:

- 1) Modem w/GPS receiver
- 2) Need to support 802.11 connection in certain locations for software updates
- 3) Appropriate antenna (hockey puck style preferred)
- 4) All appropriate mounting materials, brackets and wires
- 5) Modem and vehicle input devices cannot draw more than 3Amps when ignition is off

Total draw on vehicle not to exceed 15Amps

b. Vehicles to be outfitted with new modems:

VEHICLE TYPE	QUANTITY
Engines	13
Trucks	6
Ambulances	8
C3 Tahoe	1
K1 Van	1
Chevrolet Station Wagons	2
Ford 550 Truck	2
Rescue (Fire Engine) (currently has MDC installed)	1
Chevy Tahoe (currently have MDC installed)	2
Chevy Pickup (GPS only required)	2
Chevy Station Wagon (GPS only required)	4

c. Additional equipment to be used for “hot swap” spares”:

- 1) Modems w/GPS Qty - 6
- 2) Antennas Qty - 6

- d. The following hardware is also required for in-vehicle software functionality.
 - 1) Panasonic Toughbook CF29 – Qty 33
 - a) 1.2Ghz processor, 512MB ram, 60GB hard drive, 13.3 1024X768 (XGA) transmissive, anti-reflective TFT active matrix color LCD w/touch screen integrated CD-rom, 2 additional USB ports
 - b) Windows 2000 Professional operating system
 - 2) Additional battery and hard drive required for immediate repairs
 - 3) 3-year warranty on Toughbooks and all parts and accessories purchased
 - 4) Required Options: Integrated wireless, CDPD, GPRS or CDMA compatible, vehicle mount port replicator
 - 5) Any vehicle mounting information is requested to assist our staff on the installation of the Panasonic Toughbook vehicle mount port replicator
 - 6) Mounts required for 33-vehicles
- e. In-vehicle software requirements:
 - 1) In-vehicle software will be required in two vehicles only. Installed and configured on the Toughbook CF29.
 - 2) Need the ability to track all vehicles equipped with GPS receivers
 - 3) Digital map, display vehicles
 - 4) Ability to display incident locations
 - 5) Locate addresses
 - 6) Locate vehicle's accuracy to 10 meters
 - 7) Zoom in, zoom out, pan
 - 8) Place map pins at user-defined locations (businesses, incidents, job locations, etc.)
 - 9) Change map pin title and symbol
 - 10) Display base map using ESRI shape files (*.shp)
 - 11) Support satellite and aerial imagery in standard and compressed formats
- f. In-vehicle functions:
 - 1) When the vehicle is turned on, the system should automatically log into the system
 - 2) There should be no user involvement for GPS transmissions
 - 3) The unit will have the capability of sending position reports on a fixed interval or of storing a number of position reports and forwarding the information to the control center on a fixed interval

3. Departmental Connectivity

- 1) The Manchester Fire Department communication center will be the ONLY place to view and manage the Fire Department's unit locations, in addition to two of the Fire Department's mobile units.
- 2) The Fire Department will have three seats in their communication center: two dispatchers, two call takers and one dispatch supervisor. The two dispatchers and one supervisor will have the ability to make additions and changes to their local displays.

VI. REFERENCES

List those customers, cities or towns of similar size, to whom you have supplied the same or similar software and hardware as proposed.

<u>Company</u>	<u>Address</u>	<u>Person's Name</u>	<u>Telephone</u>
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VII. SCHEDULE

The City is looking for pricing in such a way as to allow for a modular implementation of this system. Therefore, pricing must be broken down into the following four (4) areas: Central System, Police Department, Water Works and Fire Department. These correspond to the requirements, functionality and technical specifications as described in sections II through V. Please provide the pricing on separate pages to allow for clarification. For the Central System, if pricing is based on the number of vehicles being monitored, provide pricing in a tiered format to allow for the modular implementation. List detailed product numbers, descriptions, quantities and prices. List the maintenance cost per year and the length of warranty.

A. Central System

<u>Product</u>	<u>Description</u>	<u>Quantity</u>	<u>Unit Price</u>	<u>Total Price</u>	<u>Maintenance</u>
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B. Police Department

<u>Product</u>	<u>Description</u>	<u>Quantity</u>	<u>Unit Price</u>	<u>Total Price</u>	<u>Maintenance</u>
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C. Water Works

<u>Product</u>	<u>Description</u>	<u>Quantity</u>	<u>Unit Price</u>	<u>Total Price</u>	<u>Maintenance</u>
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D. Fire Department

<u>Product</u>	<u>Description</u>	<u>Quantity</u>	<u>Unit Price</u>	<u>Total Price</u>	<u>Maintenance</u>
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VIII. PROPOSAL FORM

TO: _____

City of Manchester
State of New Hampshire

In compliance with the invitation for proposals to furnish supplies, materials, equipment, and services on the accompanying schedules, the undersigned (name) _____ a corporation organized and existing under the laws of the State of _____ or a general partnership consisting of _____ of _____ City of _____ State of _____ hereby proposes to furnish, within the time specified in the Request for Proposals, the supplies, materials, equipment, and services at the prices stated opposite the respective items listed on the SCHEDULE.

Upon receipt of written notice of the acceptance of this proposal, the undersigned will, if required, execute a form of contract in accordance with the proposal as accepted and give bonds, with good and sufficient surety or sureties, for the faithful performance of the Contract, and for payment for labor and materials, within ten (10) days after the prescribed forms are presented for signature.

Discount will be allowed for receipt of prompt payment as follows:

within _____ calendar days, _____ percent (____ %);

within _____ calendar days, _____ percent (____ %);

within _____ calendar days, _____ percent (____ %);

Time, in connection with discount offered, will be computed from date of completion and/or delivery and acceptance at destination, or from date correct bill or voucher properly certified by the Contractor is received if the latter date is later than the date of completion and acceptance and/or delivery and acceptance

Deliveries are to be made to: _____.

Delivery and/or completion to be made within _____ days from the date of notification by the City. TIME IS OF THE ESSENCE.

If the undersigned fails to perform any of the promises made herein, the proposal security, which is deposited with the _____ shall be paid to the City of Manchester or payment of the bond herewith deposited will be enforced for the benefit of the City of Manchester as liquidated damages for such default; otherwise the proposal security will be returned to the undersigned.

The undersigned as Bidder, declares that only parties interested in the proposal as principals are named herein; and that this proposal is made without collusion with any other person, firm or corporation; that no officer or agent of the City is directly or indirectly interested in this proposal; and he proposes and agrees that if this proposal is accepted he will contract with the City in accordance with the Specifications, and the Terms and Conditions as spelled out in this Sealed Proposal.

Dated _____, 20____.

Authorized Signature of Bidder & Title

(please print or type name of Bidder & Title)

Address

Full names and addresses of all persons interested in this proposal as principals are as follows:

<u>NAME</u>	<u>ADDRESS</u>
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IX. SAMPLE CONTRACT

INFORMATION SYSTEMS DEPARTMENT
THE CITY OF MANCHESTER
NEW HAMPSHIRE 03101

CONTRACT

Sealed Proposal IS-0404

Agreement made _____ 20 ____ between the City of Manchester, a
municipal corporation of the State of New Hampshire, herein referred to as "City", and
_____ of _____, City of
_____, State of _____ herein referred to as
"Contractor".

For the considerations set forth herein, the parties agree as follows:

_____ being selected as the most appropriate Bidder, shall provide to the
City the following supplies, materials, equipment, and services:

SEE PURCHASE ORDER: _____

Such supplies, materials, equipment, and services shall be provided in accordance with the
proposal made by _____, pursuant to the Notice To Bidders, the Terms
and Conditions contained in this Sealed Proposal Invitation, and the procedures established by
the City's Procurement Code section 20 1/2-4, which is hereby incorporated by reference and
made a part hereof as if set forth herein in full.

The City shall pay _____ the price and amount set out in the
Contractor's bid on delivery to and acceptance by the City of the supplies, materials, equipment,
and services herein described, and on filing by _____ and approval by the
City of a verified claim for the amount due.

The agreement shall be inoperative during such period of time as delivery or acceptance may be
rendered impossible by reason of fire, strike, act of God, government regulations, or other cause
beyond the control of either party.

This agreement shall be binding on the assigns and successors of the parties.

IN WITNESS WHEREOF, THE PARTIES HAVE EXECUTED THIS AGREEMENT AT THE
INFORMATION SYSTEMS DEPARTMENT THE DAY AND YEAR FIRST ABOVE
WRITTEN.

Signature

Diane S. Prew

Director, Information Services

Signature

Typed Name

Title

Acknowledged by:
